MicroSwitch

Controlled Power Switch

MANUAL

TABLE OF CONTENT

A - Safety instructions P1
B - Product information P3
1 - Product presentation P4
2 - Functionnalities P4
3 - Installation P5
4 - Operation mode P6

Appendix - Specification P7

ID-AL products are exclusively manufactured by Waves System
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ID-AL is a trademarks of Waves System.

WARNING: DO NOT EXPOSE TO MOISTURE AND DUST!
Unplug the power cord before any intervention!
FOR YOUR SAFETY, PLEASE READ CAREFULLY THIS OPERATION MANUAL
BEFORE USING YOUR PLAYER.

A. SAFETY INSTRUCTIONS

A.1 CE marking

The CE marking is on the ID plate, at the back of the product. It means this product complies with the low voltage CE directive, according the EN 55022 standard, and the EMC directive 61000-4-x.

A.2 Directives

• Electro-magnetic compatibility (EMC) and low voltage directive requirements are satisfied.

A.3 Overview

• The user's manual forms an integral part of the unit. It must be kept close to the unit. Precise observance of these instructions is a pre-condition to use the unit for the intended purpose and for its correct operation.

This user's manual must be passed on to any future purchaser or operator.
The staff would receive instructions concerning the correct use of the product.

• Safety for the operator as well as trouble-free operation of the unit is only ensured if use is made of original equipment parts. Moreover, use may only be made of those accessories that are specified in the technical documentation or that have been expressly approved by the manufacturer. The manufacturer cannot guarantee for the safety or proper functioning of the unit in the case where accessories or consumables are used which are not supplied by the manufacturer.

• The warranty doesn't cover damages caused by use of accessories or consumables which are not supplied by the manufacturer.

• The manufacturer only regard himself as being responsible for the equipment with regard to safety, reliability and proper functioning if assembly, re-settings, changes or modifications, extensions and repairs have been carried out by the manufacturer or a company authorized by the manufacturer and if the equipment is used in conformity with the operating instructions written in this manual.

• The MicroSwitch complies with the applicable technical safety standards at the date of print. All rights reserved for electrical diagrams, procedures, mentioned names and equipments.

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A.4 General safety instructions

This equipment left our facilities in perfect conditions of operation. In order to maintain these conditions, for safety and to avoid any risk of injury, the user must imperatively follow the safety instructions and read the ´Warning!´ notes in this manual.

This equipment, manufactured by Waves System, has been so designed that any danger is virtually excluded provided it is used according to its purpose. However, for safety reasons, we are obliged to point out the following measures:

• When operating this appliance, observe all local rules and enforced regulations!
The homologation shall be invalid if any modification or alteration is made on the appliance. Operating modified appliances may lead to a penal suit. In the interest of the safety of work, the manager and the operator will be responsible for respecting the instructions.

• Retain all packing material in case the device must be shipped. Take care that it does not fall into the hands of children. Only the original packing guarantees optimal safety of the appliance during transport. Should it be necessary to ship the product during the guarantee period, Waves System will not accept claims for damage arising during the transport from using incorrect packing material!

• This product is dedicated to broadcasting music. It may only be operated by trained or knowledgeable personnel who can handle the device correctly.

• Before every use, the operator must check the functional safety and the condition of the appliance.

• The operator must be knowledgeable in the operation of the appliance.

• This device must not be used in places with potential explosion risk. Moreover, it must not be used in an environment favouring combustion neither in a wet or excessively hot or cold place.

A.5 Safety instructions against risks pertaining to electrical current

• The appliance must be connected to a grounded AC power outlet or a correctly wired CEE AC outlet.

• Before connecting the appliance, verify that the power supply voltage and frequency match the specifications indicated on the appliance.

• Before powering, check that the appliance and the cables are not damaged. Damaged cables and connections must be immediately replaced.

• Never leave power cords enter in contact with other cables! Handle the power cord and all the cables connected to a power supply with extreme care.

• Always connect the power supply last. Check that the power switch is ´off' before connecting the appliance to mains supply. The mains outlet must be accessible after installation.

• Check the appliance and its power cord from time to time.
Unplug the power supply if you don't use the appliance anymore or for maintenance.

• Always grasp only the plug on the power supply cord. Never pull the cable to unplug.

• Power supply, repairs and maintenance must be done by qualified personnel.

• Do not switch the appliance on and off in short intervals, as this may reduce its life.

A.6 - Conditions of use :

• This product has been designed for indoor use only.

• If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

• Do not shake the device. Avoid brute force when installing or operating the device.

• When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around, for your own safety and that of bystanders.

B. PRODUCT INFORMATION

B.1 Correct usage

The MicroSwitch is designed to commutate electrical devices by a power circuit.
Correct usage implies observation of the instructions in this manual as well as observing the requirements concerning installation.

B.2 Incorrect usage

Any other use beyond this is considered as incorrect usage. The manufacturer will not be liable for any damage resulting from incorrect usage. The operator carries all risks.

B.3 CONTENTS

MicroSwitch
Power supply cable
12V Power supply unit
Manual

B.4 TECHNICAL SPECIFICATIONS

Power switch - MicroSwitch Model
Power supply nominal values
Power supply: 12V DC
Switching power: 100-250V AC / Frequency (Hz) 50-60

B.5 INSTALLATION

The apparatus must be set up in a dry and dust-free room.

Do not install the player too close to a wall.

B.6 ELECTRICAL CONNECTION

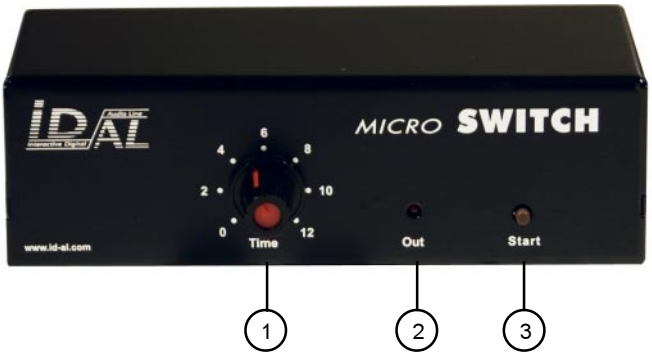
Before use, compare mains voltage with that specified on model plate.

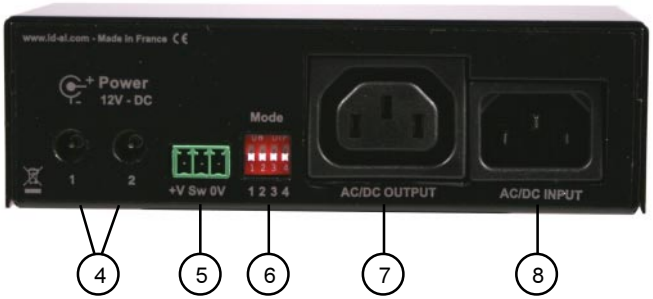
1 - Product presentation

The MicroSwitch is a commutator used to power electrical devices on input trigger or by pressing the push button on the front face of the unit. 9 trigger modes are available and can be selected by Dip Switch combination.

The MicroSwitch can be used as a standalone unit, activated by the push button or a presence detector. When used with a Plc or an AV player providing an output contact, the Microswitch is a power interface switching an electrical device on activation of an input contact.

2 - Installation





1 - Timer setting

2 - Output indicator

3 - Push button

4 - 12V power supply

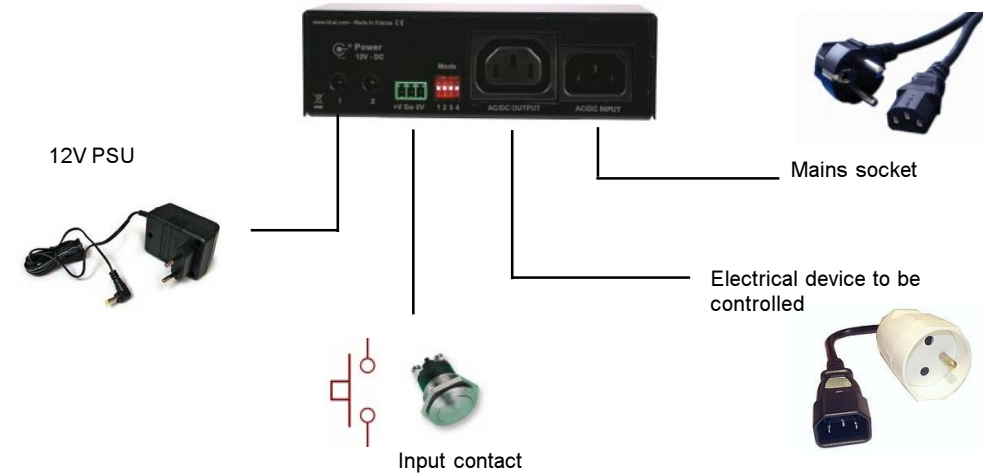
5 - Trigger command

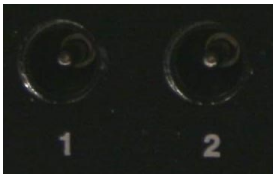
6 - Trigger mode configuration

7 - Device to be controlled

8 - Mains power supply

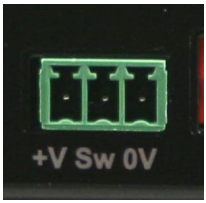
3 - Connection



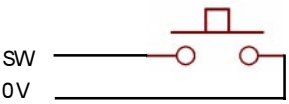


4 - Power supply: If the application requires a regulated and filtered power supply or a battery, it must be 12V DC, even though the power switch can accept tension between 10 and 15V.
DC 2.1mm / 5.5mm connector - Positive in the center.

Connect the power supply unit or a 12V battery onto input 1 or 2. The second socket is wired in parallel to provide power supply for another device.



5 - Command Input:
A push button must be connected between «SW» and «0V» pins. 0V is the ground.



The +V pin is an output supply of the input voltage (usually +12V). From this pin, it is possible to power a detector, ID-AL SensoPad or any other sensor.

6 - Configuration :

Depending on the position of the four dip switches, the Microswitch offers various switching modes and is therefore suitable for a wide range of applications.
Note, the MicroSwitch must be disconnected after any change of configuration.

1234 - Switch positions. 0 = off (low position) - 1 = on (high position)

0000 - As long as - the relay is commutated as long as the contact is present

0001 - Reverse as long as - the relay is commutated as long as the contact is NOT present

0010 - Impulsion mode - one impulsion triggers the relay, another one un-triggers it

0011 - As long as with time delay - the relay is commutated as long as the contact is present but with an adjustable time delay

0100 - Time switch for adjustable time between 0 to 12 seconds - An impulsion triggers the relay for the set time. Can be triggered again.

0101 - Time switch for adjustable time between 0 to 12 minutes - An impulsion triggers the relay for the set time. Can be triggered again.

0110 - Time switch for adjustable time between 0 to 12 seconds - An impulsion triggers the relay for the set time. Can only be triggered once.

0111 - Time switch for adjustable time between 0 to 12 minutes - An impulsion triggers the relay for the set time. Can only be triggered once.

1xxx - Permanent trigger

Appendix

Power supply :
• Nominal voltage: 12V DC
• Supply range: 10V to 15V DC

12V power consumption:
• Not commutated: 10mA
• Commutated : 50mA

Commutation power:
• Voltage: 100 to 250 Volts
• Current: 5 A maximum

Dimensions :
• Width: 144mm - Height: 44mm - Depth: 67mm without knob / 87mm with knob

Weight : 400g

Interfacing and connections
• LED status indicator
• Push button
• Potentiometer for time delay setting

• 1 dry contact input on Phoenix 3.81mm pluggable connector
• 2 DC 2.1/5.5 power supply connectors
• 4 configuration DIP switches
• IEC connector 3 male pins (mains input)
• IEC connector 3 female pins (commutation output)

http://www.id-al.com

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